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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,869	06/15/2000	LENNART CARLSSON	21547-00268-US	1354

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EXAMINER	
LUCCHESI, NICHOLAS D	
ART UNIT	PAPER NUMBER
3763	

MAIL DATE	DELIVERY MODE
07/26/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/509,869	CARLSSON ET AL.	
	Examiner	Art Unit	
	NICHOLAS D. LUCCHESI	3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-10 and 13-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-10,13-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/23/07, 5/29/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Withdrawal Of Final Rejection

1. The final rejection previously mailed has been withdrawn in view of a reconsideration of the art of record. A new non-final action on the merits follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,2,5,6,10,13,14,16 are rejected under 35 U.S.C. 102(b) as being anticipated by James '686.

James discloses a threaded implant having at least two spirals, with the front portion (the leading portion 20,24) having a greater conicity than the trailing portion thread 18. With regard to claims 5 and 6, claim 5 only requires that the implant have a non-circular portion, which can be seen in the cross sectional view of figure 3, which appears to show a square, or "non circular" portion. The language in claim 5 drawn to the improved rotational stability is considered to be functional language, which is met by James, as James is considered to also provide rotational stability as well. Similarly, the

language in claim 6 of the minimum diameter of the implant being slightly larger that the hole of the bone is purely functional language that is dependent upon the size of the hole in which it is chosen to be inserted in. Since James is intended to be threaded in the jawbone, it is clear that James is intended to threadedly engage the bone material and not only will be larger than the hole that it is creating when inserted, but will also inherently force bone material out as it is threaded in the bone. This is also pertinent to the functional language recited in claims 1 and 16, which recite how the bone is forced out upon insertion and the degree of such, depending upon the softness of the bone in which it is inserted. It is clear James is capable of performing in this manner.

Claims 1,2,5-10,13,14,16 are rejected under 35 U.S.C. 102(e) as being anticipated by Reams III '109.

Reams discloses a threaded implant having a "slight" conicity (see the gradually tapering middle section) and comprises at least two threaded spirals (it makes many turns around the implant), and has a front portion (the bottomost portion at the tip) which comprises a conical thread that has a conicity exceeding the conicity of the slightly conical threaded portion.

With regard to claims 5 and 6, note the non-circular portion 12 shown by Reams in figure 2. The language in claim 5 drawn to the improved rotational stability is considered to be functional language, which is met by Reams, as Reams is considered to also provide rotational stability as well. Similarly, the language in claim 6 of the minimum diameter of the implant being slightly larger that the hole of the bone is purely

functional language that is dependent upon the size of the hole in which it is chosen to be inserted in. Since Reams is intended to be threaded in the jawbone, it is clear that Reams is intended to threadedly engage the bone material and not only will be larger than the hole that it is creating when inserted, but will also inherently force bone material out as it is threaded in the bone. This is also pertinent to the functional language recited in claims 1 and 16, which recite how the bone is forced out upon insertion and the degree of such, depending upon the softness of the bone in which it is inserted. It is clear Reams is capable of performing in this manner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over James.

James does not disclose the conicity of the threads, the angle of inclination of the threads, the height of the threads, nor the diameter, as recited in these claims.

It would have been obvious to one skilled in the art to form the conicity, angle of inclination, height and diameter of the threads of James of any suitable dimensions, if one wished to vary the degree of retention in the bone, or compensate for the hardness/softness of the bone in which the implant is intended to be threaded in.

Dimensions of implants are well known to be varied, based upon the specific application that the implant is intended to be used for.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reams.

Reams does not disclose the conicity of the threads, the angle of inclination of the threads, the height of the threads, nor the diameter, as recited in these claims.

It would have been obvious to one skilled in the art to form the conicity, angle of inclination, height and diameter of the threads of Reams of any suitable dimensions, if one wished to vary the degree of retention in the bone, or compensate for the hardness/softness of the bone in which the implant is intended to be threaded in. Dimensions of implants are well known to be varied, based upon the specific application that the implant is intended to be used for.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to NICHOLAS D. LUCCHESI at telephone number (571)272-4977.

/Nicholas D Lucchesi/

Supervisory Patent Examiner, Art Unit 3763